

We CLAIM:

1. An air dryer system including two substantially identical air dryer units, each including, in one mode, a first moist air inlet, a first desiccant for drying air, a first dry air outlet, and first means for supplying dry air to a storage facility, said system also including, in the same mode, a first bleed valve supplying a small portion of said dry air to regenerate a second desiccant, and a first moist air purge valve for dumping moisture collected during regeneration, said system being also operable in an opposite mode and having a second moist air inlet, a second desiccant, a second dry air outlet and second means for supplying air to a storage facility, and a second bleed valve supplying a small portion of said dry air to regenerate said first desiccant, and a second moist air purge valve, and located between said moist air inlets and said desiccants, a pair of air-oil separators including means defining a generally upwardly directed air supply, each air-oil separator assembly lying in a housing, said assemblies each having a deflector plate disposed opposite said air supply, an imperforate center section and a generally vertically extending fence at least partially surrounding said center section, air passage means lying outboard of said imperforate center section and containing a filter medium, said filter medium also being associated with at least one of said center section and said fence.

2. An air dryer system as defined in claim 1 wherein said desiccant is contained in a spin-on cartridge, said desiccant being contained within a bag located within said housing.

3. An air dryer system as defined in claim 1 wherein said air-oil separators each include a flange portion lying outboard of said air passage means, said flange portion also serving to removably secure said air-oil separator in place within said air dryer system.

4. An air dryer system as defined in claim 1 wherein said air passage means comprises a plurality of pockets, each of said pockets containing said filter medium and each of said pockets having a pair of screens therein enclosing said filter medium between them.

5. An air dryer system as defined in claim 1 wherein said imperforate center section is in the form of a plate having a shallow conical dome.

6. An air dryer system as defined in claim 1 wherein said filter medium comprises an aramid fiber material.

7. An air dryer system as defined in claim 6 wherein said aramid fiber material is formed into a nonwoven blanket.

8. An air dryer system as defined in claim 7 wherein said aramid fiber material covers both of the inside of said center section and the inside surfaces of said center section, said blanket being secured to said center section and said fence by an adhesive material.

9. An air dryer system as defined in claim 1 which includes means permitting ready removal of said first and second moist air inlets.

10. An air dryer system as defined in claim 1 which includes means permitting ready removal and replacement of said first and second bleed valves.

11. An air-oil separator for use with a cartridge containing a finely subdivided desiccant, said air-oil separator being disposed in use between an air inlet valve and said cartridge, and means for directing air flow generally upwardly of said inlet valve, said air-oil separator including a flange plate for closing off a housing upstream of said air inlet valve, at least one opening in said flange plate permitting air flow therethrough, filter material disposed within said opening, an imperforate center section lying inboard of said at least one opening, a deflector beneath a portion of said center section, and a fence extending generally downwardly from said center section, said filter material also covering at least one of the lower surface of said center section and the inner surface of said fence, said air inlet directing air and entrained oil toward said deflector, and said air then passing beneath said fence and upwardly through said opening to said desiccant.

12. An air-oil separator as defined in claim 11 wherein said fiber is a surface active material tending to absorb oil on its surface from air containing oil and being charged under pressure to said desiccant, and to desorb said oil when air is flowing over said material from said desiccant.

13. An air-oil separator as defined in claim 11 wherein said filtering material is made from an aramid fiber material.

14. An air-oil separator as defined in claim 13 wherein said aramid fiber is in the form of a nonwoven fiber material.

15. An air-oil separator as defined in claim 11 wherein said fiber material is adhesively secured to both said fence and said center section.

16. An air-oil separator as defined in claim 11 wherein said at least one opening comprises plural openings.

17. An air-oil separator as defined in claim 11 wherein said at least one opening includes upper and lower screens entrapping said filter material between them.

18. An air-oil separator as defined in claim 11 wherein said at least one opening comprises a plurality of openings, said openings being comprised of a lower pocket, a lower screen, a charge of filter material, an upper screen and a top pocket cover.

19. An air-oil separator as defined in claim 11 wherein said imperforate center section includes a pointed, shallow domed section.